

Abstract of the Disclosure

An apparatus for detecting fuel-vapor gas leaks that includes a jet pump (8) that introduces outside air into and pressurizes a vapor purge system including a fuel tank (1) by gasoline flow from a fuel pump (2); an internal pressure sensor (14) for measuring vapor purge system internal pressure, an open/close controllable reference orifice (21) that causes leakage through a reference leak hole; and a storage device for storing as an initial curve pressure changes during pressurization by the jet pump (8) for a predetermined time period, with the reference orifice (21) alone opened. The device can accurately detect leakage even while an internal combustion engine is running because it judges leak presence/absence by comparing a time series in a pressure curve obtained by jet pump (8) pressurization over the predetermined time period while idling with the vapor purge system completely shut-off, with a time series in the initial curve.